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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,436	02/14/2002	Yoon Chae Cheong	7000-106	8733
27820	7590	03/08/2006	EXAMINER	
WITHROW & TERRANOVA, P.L.L.C. P.O. BOX 1287 CARY, NC 27512			WONG, BLANCHE	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/075,436

Applicant(s)

CHEONG ET AL.

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 9, 11 and 14-29 is/are rejected.
- 7) ☒ Claim(s) 2-8, 10, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date Apr'03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 9,11,14-29** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11, ln. 4, whether – a plurality of mobile terminals – is the same “a plurality of mobile terminals” in ln. 2.

Claim 14, ln. 9-10, what is meant by – the corresponding first or second values – where the active-to-standby transition timers nor mobile terminals are distinguished first and second.

Claim 17, ln. 11, whether – a first mobile terminal – is the same “a first mobile terminal” in ln. 9.

Claim 17, ln. 2 and 5, remove “adapted to” to make limitation make positive for examination.

Claim 21, ln. 13, whether – the mobile terminal – is the first or second mobile terminal.

Claim 27, ln. 4, whether – a plurality of mobile terminals – is the same “a plurality of mobile terminals” in ln. 2.

3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9, ln. 3, recites the limitation “the predefined threshold”.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1,17** are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Mizutani et al. (Pub No. US2001/0031634).

With regard to claim 1, Mizutani discloses

a) monitoring (QoS key state, para. [0047], line 3) at least one QoS parameter (QoS key 412, para. [0047], line 4) bearing on QoS;

b) determining a first value (each timer has a value, para. [0047], line 5) for an active-to-standby transition timer (wireless channel state timer 901A, para. [0047], line 2) for a first mobile terminal (MS 102, para. [0047], line 8) based on the at least one QoS parameter (QoS key);

c) setting the active-to-standby transition timer for the first mobile terminal with a first value at the end of a data communication session (see restart and timeout of wireless channel state timer 901A in Fig. 9) with the first mobile terminal; and

d) instructing (when QoS key state is off, the wireless channel state timer will timeout and transition to dormant state, but when QoS key state is on, the wireless channel state timer will restart immediately after timeout, see Fig. 8 and 9) the first

mobile terminal to transition from an active mode (active state) to a standby mode (dormant state) if another communication session (PPP keep alive timer tells whether there is packet transmission, see Fig. 8) is not necessary prior to expiration of the active-to-standby transition timer (wireless channel state timer) for the first mobile terminal, the first value for the active-to-standby transition timer for the first mobile terminal being variable based on the at least one QoS parameter (QoS key state).

With regard to claim 17, Mizutani also discloses

- a) a wireless communication interface (BS 104, para. [0039], line 9; see also Fig. 1) adapted to facilitate wireless communications with mobile terminals (MS 102); and
- b) a control system (BSC 105, para. [0039], line 4, see also Fig. 5) associated with the wireless communication interface.

#### ***Allowable Subject Matter***

6. Claims 2-8,10,12,13,18-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

8. Claims 9,11,15-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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**Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

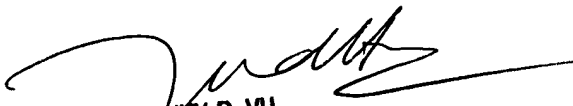
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

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February 20, 2006

  
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